**Construction and Comparison of Horizontal Axis Wind Turbines and Vertical Axis Wind Turbines**

**Abstract**

There are generally two core types of wind turbines, which are the horizontal axis wind turbine and the vertical axis wind turbine . The current project aims at presenting a comparison of both different types of these wind turbines. Wind turbines aim are to generating electricity from wind with high speeds. Wind turbines consist of a set of blades attached to a rotor hub, which together form the rotor; this rotor deflects the airflow, which creates a force on the blades, which in turn produces a torque on the shaft such and the rotor rotates around a horizontal axis and Vertical axis, which is mainly attached to a gearbox and generator.

